京大瀬戸臨海実験所附近に産する海浜性の蜘蛛について

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Seaside Spiders from the environs of Seto Marine Biological Laboratory of Kyoto University

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日本に産する海浜性の蜘蛛として最初に報告されたものは *Menemerus himeshimensis* Dönitz et Strand 1906 (Salticidae) であつて，この種は佐賀地方のみならず，本州各地の海浜の岩礁に普通に見られるものである．この実験所の海浜にも極めて多数棲息している．

又 *Desis japonica* Yaginuma 1956 (ヤマトウシオグモ) (Argyronetidae) も当実験所附近や沖縄地方から採集されているが，筆者は採集することが出来なかつた．

然し，上述の種以外に，次に記載する3種が各々満潮線附近に棲息するのを観察することが出来た．この内 *Ostearius melanopygius* (CAMBRIDGE) は従来欧州では英国のみから報告され，New Zealand から移入されたものゝようである．英国では各地に産し，庭の "rubbish heaps, sandhills" や，時には室内で見られるようである．筆者が白浜町で採集したのは満潮線附近で，枯れた海草や藻屑が附着し海水で濡れた流木の下面からである．又高知市桂浜で採集した場合は流木ではないが，やはり海浜の木材の下面からであり，鹿児島県佐多岬で採集したと思われるものも海浜であることから，尠くとも海浜に多く棲息することが考えられる．然し英国に於ける棲息状態や八木沼氏により箕面で採集された標品があることから見ると，必ずしも海浜に限つて産するものではないようである．

Anacotyle setoensis sp. nov. (Micryphantidae) 及び *Litisedes shirahamaensis* gen. et sp. nov. (Agelenidae) の2種は何れも満潮線附近の礫の間に群棲し，殆んど同じような習性を持つている．これ等の造巣性や食性の詳細は不明であるが，海浜に打ち上げられた海藻の間にいる小虫を捕食しているものと思われる．

Ostearius J. E. Hull 1911

Trans. Nat. Hist. Soc. Northumb. (N.S.), III (3); p. 583

Ostearius melanopygius (O.P. CAMBRIDGE)

(Pl. 1, Fig. 1-4)

Linyphia melanopygius	O.P. CAMBRIDGE, 1879,
Tmeticus nigricauda	O.P. CAMBRIDGE, 1907,

Ostearius nigricauda	J.E. HULL, 1911,
Ostearius melanopygius	A.R. JACKSON, 1933,
	LOCKET-MILLIDGE, 1953,

DESCRIPTION: ♂ ♀ : *Carapace* brown, suffused with black, with faint darker cervical grooves and radial striae. Carapace viewed from above evenly rounded on the sides, with a slight constriction at the cervical groove, and broadly rounded across the front; carapace viewed from the side gently and smoothly ascending to the back of the head where there is a slight depression, and rounded over the head; ocular area slightly convex and slanting downward; clypeus concave immediately below eyes, then straight and slightly protruding, nearly as high as the ocular area. Both rows of eyes nearly straight; all eyes subequal in size, except for the smaller anterior median eyes. The anterior median eyes separated by less than one radius, and removed from the anterior lateral eyes by more than one radius; the posterior median eyes separated by about one radius, and removed from the posterior lateral eyes by one diameter. Chelicerae armed with 4 large promarginal and 5 minute retromarginal teeth; in the male a stridulating file present.

Sternum brown, suffused with black, heart-shaped, convex, as long as wide, and sparsely furnished with stout bristles. Hind coxae separated by the radius. Legs yellowish brown, and rather long; all tibiae with two dorsal spines. The position of a trschobothrium on metatarsus I is 0,5.

Abdomen fine red, with a black marking around the spiners.

Epigyne: The opening divided into two by a partition; dark spermatheca are seen on each side of the opening htrough the body wall in alcohol specimens.

Male palp; Femur rather slender, two thirds as long as femur I, gently curved inward. Patella short, widened distally, curved downward. Tibia as long as patella. widened distally like a funnel; the dorso-lateral margin furnished with an apophysis which is divided into two pointed ends, and separated from the mesal lobe by a broad rounded notch. Paracymbium long. Bulbal structure as shown in Fig. 2,

MEASUREMENTS: By the specimens from Katsurahama, Kochi City.

Body;	Length			Width	
	Total	Abd.	Cth.	Abd.	Cth.
♂	2.06	1.44	1.25	0.81	0.94
♀	2.25	1.44	1.25	1.00	0.94

Legs ; ♂ ;	Fem.	Pat. & Tib.	Met. & Tar.	Total
I	1.75	1.43	1.68	4.86
II	1.62	1.31	1.43	4.36
III	1.56	1.06	1.31	3.93
IV	1.81	1.43	1.87	5.11

LOCALITIES : Katsurahama, Kochi City, Apr. 5, 1956, 2♂, 3♀. (R. Oi).
1953, 1♀, missed the date (August?) and locality (Sata, Kagoshima-Pref.?), (R. Oi).
Minoo, Osaka-Pref., Aug. 9, 1955, 1♀, (T. Yaginuma).
Shirahama-cho, Wakayama-Pref., June 3, 1959, 1♀ (R. Oi).

REMARK : It seemes that my examples are simillar to this species from England in the structures of the body and sex organs, except for the difference in the form of tibial apophysis of the male palp.

Anacotyle E. Simon 1926

Les Archnides de France VI (2); p. 359, 490.

Type : *A. stativa* (E. Simon) 1881

Anacotyle setoensis sp. nov.

(Pl. 1, Fig. 5–9)

DESCRIPTION : ♂ ♀ : The female is considerably larger than the male, though similar in color and form. ♂ : Carapace bright deep-reddish-brown, with darker cervical grooves, radial striae and fine black margins ; ocular area black. Carapace viewed from above evenly rounded on the sides with a constriction at the cervical groove ; head plumpy, rather produced and rounded across the front. Carapace viewed from the side gently ascending to ocular area, slightly depressed at the groove and slightly elevated behind eyes. Head has no lobe and sulcus, and carries 6–7 small bristles along the median line. Clypeus nearly straight and vertical, and narrower than ocular area. The anterior median eyes smaller than the remainders. Anterior eyes equidistant to each other, separated by one radius and arranged in a straight line. Porterior eyes in a slightly recuved line ; the posterior median eyes separated by one diameter and removed from the posterior lateral eyes by about one radius.

Chelicerae with four promarginal teeth, of which the basal one is very minute and broadly separated from the others ; minute retro-marginal teeth

are 4 in number.

Sternum glossy and similar in color to the carapace, convex, heart-shaped and with a straight anterior margin, as long as wide, furnished with sparsely arranged numerous long bristles, and broadly produced between hind coxae.

Legs light reddish-brown, gradually becoming darker toward the distal end of each segment, particularly in metatarsi and tarsi which are almost entirely black. All tibiae with one dorsal spine; the position of tibia I spine about 0.21 and of tibia IV spine about 0.32. Met. I/Tar. I 1.2. Met. IV/Tar. IV 1.3. Metatarsus IV lacks a trichobothrium; The position of a trichobothrium on metatarsus I is 0.58 (♀)-0.56 (♂).

Abdomen black except the pale epigastric area, with several faint pale fine chevrons, and four reddish impressed dots dorsally. There are faint whitish longitudinal lines on the sides of median area of venter.

Epigyne with a small scape on the ventral wall of a transversal large opening. The dark spermathecae are seen through the body wall between the opening and the epigastric furrow.

Male palp: Tibia with a large median apophysis on the dorsal margin, and armed with a small pointed apophysis on each side of median apophysis. The style of embolus makes a half or more of an open spiral turn at the end of the bulb. The structures of the bulb are similar to that of *A. stativa* (E. SIMON).

MEASUREMENTS:

Body:	Length			Width	
	Totol	Abd.	Cth.	Abd.	Cth.
♂	1.90	1.0	0.9	0.78	0.68
♀	2.60	1.55	1.12	1.00	0.84

Legs: ♂:	Fem.	Pat. & Tib.	Met.	Tar.	Total
I	0.81	0.94	0.63	0.50	2.88
II	0.75	0.88	0.59	0.47	2.69
III	0.69	0.75	0.56	0.38	2.38
IV	0.81	0.94	0.69	0.44	2.88

TYPE LOCALITY: Shirahama, Wakayama-Pref., June 10, 1956, ♂ (holotype), ♀ (allotype), 2♂, 5♀; June 3, 1959, ♂, ♀, (R. OI)

This species occurs among gravels near the level of flood tide on the sea shore.

Litisedes gen. nov.

Type: *Litisedes shirahamaensis* sp. nov.

Carapac with a plump head of which the sides are parallel; the. clypeus narrow and smaller than the diameter of the lateral eye.

Chelicerae with long hairs in row on the upper side of the furrow and the furrow is rather obliquely and armed with three rather large angular teeth on the promargin and seven small teeth on the retromargin.

Endite rather broad and obtuse.

Labium as long as wide.

Colulus present.

Anterior spinnerets burly and cylindrical; median pair smallest; posterior pair are of two segments, the distal one is slender and pointed but as long as the burly and cylidrical basal one.

Litisedes shirahamaensis sp. nov.

DESCRIPTION: ♀ ♂: *Carapace* shining reddish-brown and gradually changed to lighter brownish yellow toward the pars thoracica, with darder chelvical grooves, and radial striae; a needle shaped medium line nut-brown. Viewed from above carapace pear-shaped, evenly rounded on the sides and constricted at the chelvical grooves; the sides of plump head are parallel.

All *eyes* subequal in size, except for the slightly larger lateral eyes. Anterior eyes in a nearly straight line, the median eyes separated by a space a little less than one diametr and a little more than the radius from the lateral. eyes, Posterior eyes in a slightly recurved line; the median eyes separated by one and a halfdiameter and a little more than one diameter from the lateral eyes. In the trapezoid of median eyes the posterior side wider than long. Clypeus very narrow and smaller than the diameter of the lateral eye.

Chelicerae convex at the base, with a lateral condyle, nut-brown in color, furnished with long curved hairs in row on the upper side of the furrow, armed with three promarginal and seven small retromarginal teeth. *Endites* parallel, obtuse, and not so slender as in *Desis*. *Labium* as long as wide.

Sternum yellowish brown with darker margins, heart-shaped, as long as wide, and the coxae IV separated by about the diameter. *Legs* yellowish

brown, rather stout, with three tarsal claws; coxae not notched, tibiae and metatarsi spinose.

Abdomen dark-gray in ground color with several very faint pale chevrons dorsally, pale yellowish brown ventrally, and all clothed with black fine hairs. Anterior spinnerets burly and cylindrical, median pair smaller than the rests, posterior spinnerets are of two segments, of which the terminal one is slender but as long as the basal one. The small colulus present. The spiracle of the tracheal system is just in front of the spinnerets.

The tibia of male palp provided with an apophysis at the mesial end; the bulbal structure and the epigynum of the female are as shown in Fig. 13–15.

MEASUREMENTS:

Body; ♀	Length			Width	
	Total	Abd.	Cth.	Abd.	Cth.
	6.12	3.56	3.18	2.31	1.87

Legs; ♀	Fem.	Pat. & Tib.	Met.	Tar.	Total
I	2.18	2.96	2.00	1.25	8.39
II	2.18	2.62	1.93	1.12	7.85
III	1.93	2.18	1.95	1.00	7.04
IV	2.43	2.89	2.50	1.12	8.92
P.	1.18	1.25		1.06	3.49

The position of a trichobthrium on metatarsus I is 0.94.

TYPE LOCALITY: Shirahama, Wakayama-Pref. June 10, 1956, several ♀; June 3, 1959, 2♀, 2♂ (♀ holotype, ♂ allotype), 4 unad. (R. OI).

This species occurs among the gravels near the level of flood tide on the sea shore.

Explanation of Plate

Ostearius melanopygjus

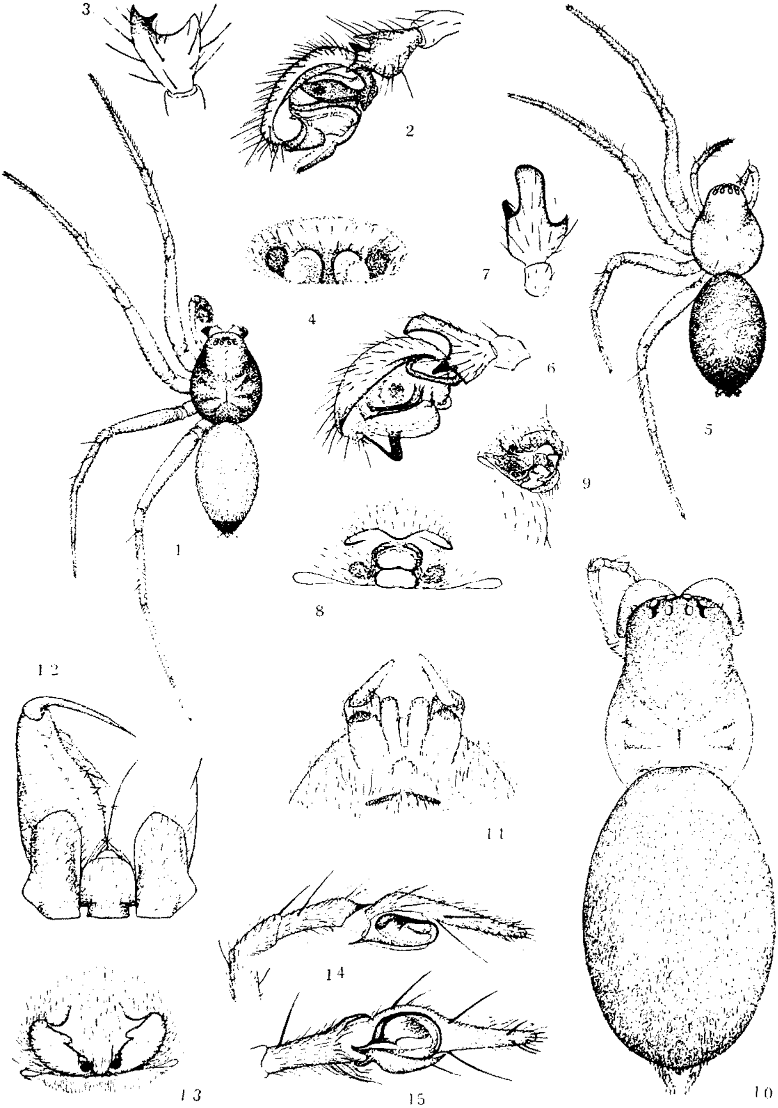
Fig. 1. Body of male from above.
Fig. 2. Lateral aspect of palp.
Fig. 3. Left palpal tibia from above.
Fig. 4. Epigyne.

Anacotyel setoensis.

Fig. 5. Body of female from above.
Fig. 6. Lateral aspect of palp.
Fig. 7. Left palpal tibia from above.
Fig. 8. Epigyne.
Fig. 9. Epigyne from the side.

Litisedes shirahamaensis.

Fig. 10. Body of female from above.
Fig. 11. Spinnerets from below
Fig. 12. Mouth parts from below.
Fig. 13. Epigyne.
Fig. 14 Mesial aspect of palp.
Fig. 15. Ventral aspect of palp



Oi, R.—The Seaside spiders.